Appl. No. 10/573,606

Amdt. Dated October 13, 2009

Reply to Office Action of July 15, 2009

**Amendments to the Claims** 

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:** 

Claim 1-14. (Cancelled)

15. (Currently amended) A contrast agent as defined elaimed in claim 25 wherein R is a

cyanine dye.

16. (Currently amended) A contrast agent as <u>defined</u> elaimed in claim 25 wherein the target

is a receptor or a non-catalytical target.

17. (Currently amended) A contrast agent as <u>defined</u> elaimed in claim 25 comprising a

contrast agent substrate, wherein the target is an abnormally expressed enzyme, such that the

contrast agent changes pharmacodynamic properties and/or pharmacokinetic properties upon

a chemical modification from a contrast agent substrate to a contrast agent product upon a

specific enzymatic transformation.

18. (Previously presented) A contrast agent as claimed in claim 17 wherein the contrast agent

changes binding properties to specific tissue, membrane penetration properties, protein

binding or solubility properties upon the chemical modification.

19. (Cancelled)

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20. (Currently amended) A contrast agent as <u>defined</u> elaimed in claim 25 wherein V is selected from peptides, peptoid moieties, oligonucleotides, oligosaccharides, lipid-related compounds and traditional organic drug-like small molecules.

21. (Previously presented) A contrast agent as claimed in claim 20 wherein V is a peptide.

22. (Cancelled)

23. (Currently amended) A contrast agent as <u>defined</u> elaimed in claim 25 for the manufacture of a diagnostic agent for use in a method of optical imaging of CRC involving administration of said diagnostic agent to an animate subject and generation of an image of at least part of said subject.

24. (Previously presented) A method of generating an optical image of an animate subject involving administering a contrast agent to the subject and generating an optical image of at least a part of the subject to which the contrast agent has distributed, characterized in that a contrast agent as defined in claim 25 is used.

25 (Currently amended) A pharmaceutical composition for optical imaging for diagnosis of CRC, for follow up of progress of CRC development or for follow up of treatment of CRC, comprising:

(i) an optical imaging contrast agent with affinity for an abnormally expressed biological target associated with colorectal cancer (CRC), said contrast agent being of formula I:

$$V-L-R$$
 (I)

wherein:

V is one or more vector moieties having affinity for an abnormally expressed target in CRC, where said target is selected from c-met, MMP-14, COX-2, beta-catenin and cathepsin B, said vector moiety having a molecular weight below 4,500 Daltons;

L is a linker moiety or a bond, and

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R is one or more reporter moieties detectable in optical imaging, wherein the contrast agent has a molecular weight below 7,000 Daltons and a water solubility of at least 1mg/ml at pH 7.4;

(ii) at least one pharmaceutically acceptable carrier or excipient.